

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as indicated hereafter. It is believed that the following amendments and additions add no new matter to the present application.

In the Specification: [Use ~~strikethrough~~ for deleted matter (or double square brackets “[[]]” if the strikethrough is not easily perceivable, *i.e.*, “4” or a punctuation mark) and underlined for added matter.]

Please amend the paragraph starting on p. 5, ln. 4 as follows:

FIG. 9 is a line card data structure of a line card table for use by the switch concentration module in FIG ~~[[4]]~~7.

FIG. 10 is a DSL port data structure of a DSL port table for use by the switch concentration module in FIG ~~[[4]]~~7.

FIG. 11 is a backplane interface data structure of a backplane interface table for use by the switch concentration module in FIG ~~[[4]]~~7.

FIG. 12 is an uplink interface data structure of an uplink interface table for use by the switch concentration module in FIG ~~[[4]]~~7.

FIG. 13 is a cross-connect data structure of a cross-connect table for use by the switch concentration module in FIG. ~~[[4]]~~7.

FIG. 14A is one portion of a ~~cross-connect~~ cross-connection table for use by the switch concentration module in FIG. ~~[[4]]~~7.

FIG. 14B is one portion of a ~~cross-connect~~ cross-connection table for use by the switch concentration module in FIG. ~~[[4]]~~7.

FIG. 14C is one portion of a ~~cross-connect~~ cross-connection table for use by the switch concentration module in FIG. ~~[[4]]~~7.

FIG. 15 is a virtual circuit link (VCL) data structure of a virtual circuit link table for use by the switch concentration module in FIG ~~[[4]]~~7.

FIG. 16 is ~~a cross-connect~~ an auto-configuration record for use by the switch concentration module in FIG ~~[[4]]~~7.

Please amend the paragraph starting on p. 8, ln. 8 as follows:

Filter 34 may be any standard plain old telephone service (POTS) splitter or any similar device capable of separating voice-frequency traffic from high-speed data traffic provided on a DSL loop 26 carrying both. Filter 34 is coupled to DSL loop 26. In operation, filter 34 receives voice-frequency traffic and high-speed data traffic as input from DSL loop 26 and provides the voice-frequency traffic to telephone 36 and the high-speed data traffic to DSL remote transceiver unit 38. Telephone 36 may be any conventional or future telephone or any similar device capable of converting sounds, such as voice, into analog data and transmitting the analog data over a DSL loop 26. DSL remote transceiver unit 38 functions as a DSL modem that provides the high-speed data traffic to computer 40. In the commercial subscriber environment, DSL remote transceiver unit 38 is coupled to a network hub 41, which supports a network of computers 40 and workstations 42. Computer 40 and workstation 42 may be any computer capable of receiving high-speed data traffic from a DSL loop 26. Those of ordinary skill in the art should understand that, although telephone 36 and computer 40 and workstation 42 are represented by different elements in FIG. 1, this invention contemplates combining telephone 36 with computer 40 and/or workstation 42. For purposes of this invention, the important aspect is that, because DSL loop 26 carries both voice-frequency traffic and high-speed data traffic, filter 34 separates the voice-frequency traffic and the high-speed data traffic at the premises of residential subscriber 22 and/or commercial subscriber 24 to enable both voice services and high-speed data services.

Please amend the paragraph starting on p. 11, ln. 23 as follows:

Referring to FIGS. 4 – 6, in the preferred embodiment of the present invention, service provider network 32 (FIG. [[3]]1) is an ATM network. Various ATM standards and specifications exist for implementing various aspects of ATM networks. Although many of these aspects are known to one of ordinary skill in the art, they are introduced here for clarity and completeness. FIG. 4 illustrates an ATM transmission medium 66 for transmitting the high-speed data traffic on communications channels 50 and 54 data communications through DSLAM 44 (FIG. 2). Data is routed through an ATM network based on virtual path connections (VPCs) 68 and virtual channel connections (VCCs) 70. VPCs 68 and VPCs 70 exist across a node in the ATM network. A virtual path link (VPL) or a virtual channel link (VCL) can exist between

connecting nodes in the ATM network. A VPC or VCC is an ordered list of pairs of VPLs or VCLs, respectively.

Please amend the paragraph starting on p. 17, ln. 14 as follows:

FIGS. 14a – 14c illustrate a cross-connection table 210 which may be used for implementing another portion of management software 100 in FIG. 7. ~~Cross-connect~~ Cross-connection table 210 may include a list of “uplink interface:VPI:VCI” values 212 associated with a list of “backplane interface:VPI:VCI” values 214 and a related list of “status” values 216. Values 212 may be VPI/VCI addresses corresponding to a first set of cross-connections which are calculated based on a default logical VPI/VCI address associated with the VPI/VCI address for communications channels 50. Values 214 may be VPI/VCI addresses corresponding to a second set of cross-connections which are associated with VPI/VCI addresses for each link on backplane interface 60.

In the Abstract: [Use ~~strikethrough~~ for deleted matter (or double square brackets “[[]]” if the strikethrough is not easily perceivable, i.e., “4” or a punctuation mark) and underlined for added matter.]

Please amend the abstract as follows:

ABSTRACT OF THE DISCLOSURE

Systems and methods are provided for automatically configuring cross-connects in a switch. One exemplary embodiment is a digital subscriber line access multiplexer for automatically configuring a plurality of cross-connects comprising: ~~means for~~ obtaining a default logical VPI/VCI address associated with the plurality of data communications channels; ~~means for~~ defining a first plurality of unique logical VPI/VCI addresses based on a predefined set of rules for incrementing logical VPI/VCI addresses, each of the first plurality of unique logical VPI/VCI addresses associated with one of the plurality of digital subscriber line communications channels; ~~means for~~ determining a second plurality of unique logical VPI/VCI addresses based on the default logical VPI/VCI address and the predefined set of rules; and ~~means for~~ creating signal connectivity between the plurality of data communications channels and the plurality of

digital subscriber line communications channels by linking the first and second unique logical VPI/VCI addresses.